

Amendments to the Claims:

The following listing of claims replaces all prior versions and listings of the claims in this application.

Listing of the Claims:

Claim 1 (Currently Amended): A high-molecular weight aliphatic polyester, whose molecular weight has been highly increased, comprising a chain-lengthening reaction product of (a) a ring-opening (co)polymer of glycolide or a mixture containing at least 70% by weight of glycolide and at most 30% by weight of another cyclic monomer, and (b) an oxazoline compound having at least two oxazoline ring structures in its molecule,

wherein the chain-lengthening reaction product is a chain-lengthened ring-opening polymer in which the oxazoline compound is bonded as a chain-lengthening agent,

wherein the molecular weight of the chain-lengthening reaction product has been increased to the extent that a ratio (Mw_2/Mw_1) of a weight average molecular weight (Mw_2) of the ring-opening (co)polymer after the chain lengthening to a weight average molecular weight (Mw_1) of the ring-opening (co)polymer before the chain lengthening is 1.65 to ~~5.00~~ 10.00,

wherein the ring-opening (co)polymer before the chain lengthening has a weight average molecular weight of at least 30,000 and is subjected to the chain-lengthening reaction to produce the high-molecular weight ring-opening (co)polymer,

wherein the weight average molecular weight (Mw) of the ring-opening (co)polymer reaction product after the chain lengthening, whose molecular weight has been increased by the chain-lengthening reaction, is 181,000 to 500,000,

wherein a molecular weight distribution (M_w/M_n) represented by a ratio of a weight average molecular weight (M_w) of the ring-opening (co)polymer, whose molecular weight has been highly increased by the chain-lengthening reaction, to a number average molecular weight (M_n) thereof is 2.30 to 4.50, and

wherein a difference ($T_2 - T_1$) between a 1%-weight loss-starting temperature T_2 on heating of the ring-opening (co)polymer after the chain lengthening and a 1%-weight loss-starting temperature T_1 on heating of the ring-opening (co)polymer before the chain lengthening is 15°C to 30°C.

Claims 2-4 (Canceled).

Claim 5 (Previously Presented): The high-molecular weight aliphatic polyester according to claim 1, wherein the ring-opening (co)polymer has a weight average molecular weight of 30,000 to 110,000 before the chain lengthening and the weight average molecular weight of the ring-opening (co)polymer reaction product after the chain lengthening is 181,000 to 500,000.

Claim 6 (Canceled).

Claim 7 (Previously Presented): The high-molecular weight aliphatic polyester according to claim 1, wherein the 1%-weight loss-starting temperature T_2 on heating of the ring-opening (co)polymer after the chain lengthening is at least 252°C.

Claims 8-9 (Canceled).

Claim 10 (Previously Presented): The high-molecular weight aliphatic polyester according to claim 1, wherein the oxazoline compound having at least two oxazoline ring structures in its molecule is 2,2'-m-phenylene-bis(2-oxazoline).

Claim 11 (Currently Amended): A process for producing a high-molecular weight aliphatic polyester, which comprises subjecting a ring-opening (co)polymer of glycolide or a mixture containing at least 70% by weight of glycolide and at most 30% by weight of another cyclic monomer to a chain-lengthening reaction with an oxazoline compound having at least two oxazoline ring structures in its molecule to highly increase the molecular weight thereof to the extent that a ratio (Mw_2/Mw_1) of a weight average molecular weight (Mw_2) of the ring-opening (co)polymer after the chain lengthening to a weight average molecular weight (Mw_1) of the ring-opening (co)polymer before the chain lengthening is 1.65 to ~~5.00~~ 10.00,

wherein the chain-lengthening reaction is conducted in the presence of the oxazoline compound in a proportion within a range of 1 to 10 parts by weight per 100 parts by weight of the ring-opening (co)polymer,

wherein the ring-opening (co)polymer before the chain lengthening has a weight average molecular weight of at least 30,000 and is subjected to the chain-lengthening reaction to produce the high-molecular weight ring-opening (co)polymer, and

wherein the ring-opening (co)polymer and the oxazoline compound are subjected to the chain-lengthening reaction under conditions wherein the reaction temperature is not lower than the melting temperature of the ring-opening (co)polymer, but not higher than 300°C, and the reaction time is 10 to 30 minutes, thereby obtaining a high-molecular weight ring-opening (co)polymer having the following properties:

a) the weight average molecular weight (Mw) of the ring-opening (co)polymer after the chain lengthening, whose molecular weight has been increased by the chain-lengthening reaction, is 181,000 to 500,000,

b) a molecular weight distribution (Mw/Mn) represented by a ratio of a weight average molecular weight (Mw) of the ring-opening (co)polymer, whose molecular weight has been highly increased by the chain-lengthening reaction, to a number average molecular weight (Mn) thereof is 2.30 to 4.50, and

c) a difference ($T_2 - T_1$) between a 1%-weight loss-starting temperature T_2 on heating of the ring-opening (co)polymer after the chain lengthening and a 1%-weight loss-starting temperature T_1 on heating of the ring-opening (co)polymer before the chain lengthening is 15°C to 30°C.

Claims 12-17 (Canceled).

Claim 18 (Previously Presented): The production process according to claim 11, wherein the ring-opening (co)polymer has a weight average molecular weight of 30,000 to 110,000 before the chain lengthening and the weight average molecular weight of the ring-opening (co)polymer after the chain lengthening is 181,000 to 500,000.

Claims 19-22 (Canceled).

Claim 23 (Previously Presented): The production process according to claim 11, wherein the ring-opening (co)polymer and the oxazoline compound are subjected to the chain-lengthening reaction under conditions that the reaction temperature is not lower than the melting temperature of the ring-opening (co)polymer, but not higher than 280°C, and the reaction time is 10 to 30 minutes.

Claim 24 (Previously Presented): The production process according to claim 11, wherein the 1%-weight loss-starting temperature T_2 on heating of the ring-opening (co)polymer after the chain lengthening is at least 252°C.

Claim 25 (Canceled).

Claim 26 (Previously Presented): The production process according to claim 11, wherein the chain-lengthening reaction is conducted in the presence of the oxazoline compound in a proportion within a range of 1 to 5 parts by weight per 100 parts by weight of the ring-opening (co)polymer.

Claim 27 (Canceled).

Claim 28 (Previously Presented): The production process according to claim 11, wherein the oxazoline compound having at least two oxazoline ring structures in its molecule is 2,2'-m-phenylene-bis(2-oxazoline).

Claim 29 (Previously Presented): The high-molecular weight aliphatic polyester according to claim 1, comprising the reaction product of the ring-opening (co)polymer and 1 to 10 parts by weight of the oxazoline compound, per 100 parts by weight of the ring-opening (co)polymer.

Claim 30 (Previously Presented): The high-molecular weight aliphatic polyester according to claim 1, comprising the reaction product of the ring-opening (co)polymer and 1 to 7 parts by weight of the oxazoline compound, per 100 parts by weight of the ring-opening (co)polymer.

Claim 31 (Previously Presented): The high-molecular weight aliphatic polyester according to claim 1, comprising the reaction product of the ring-opening (co)polymer and 1 to 5 parts by weight of the oxazoline compound, per 100 parts by weight of the ring-opening (co)polymer.